Self-disclosure mediates the effects of gender orientation and homophobia on the relationship quality of male same-sex friendships

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Mark T. Morman¹, Paul Schrodt², and Michael J. Tornes³

Abstract

This study tested the degree to which self-disclosure mediates the effects of gender orientation and homophobia on relational satisfaction, closeness, and commitment in men's same-sex friendships. Participants included 211 men from the southwest region of the US, who reported on either geographically close (n = 107) or long distance same-sex friendships (n = 104). Results indicated that self-disclosure mediates the positive effect of femininity on satisfaction, closeness, and commitment in men's same-sex friendships. Self-disclosure also mediates the negative, indirect effects of homophobia on all three relational outcomes. Tests of structural invariance provided no evidence to suggest that the indirect effects of femininity and homophobia on all three relational outcomes vary as a function of geographic distance.

Keywords

Same-sex friendship, long-distance friendship, self-disclosure, closeness, satisfaction, commitment, gender, homophobia

Corresponding author:

¹ Baylor University, USA

² Texas Christian University, USA

³ University of Oklahoma, USA

Mark T. Morman, Department of Communication, OBP #97368, Baylor University, Waco, TX 76798, USA. Email: Mark_Morman@baylor.edu

Close friendships provide individuals with a means of achieving the basic need for an intimate connection with another person. The relational quality of such friendships is related to a host of important psychosocial benefits such as companionship, affection, social support, mutual assistance, intimacy, self-validation, social adjustment, and personal happiness (Buote et al., 2007; Demir, Ozen, Dogan, Bilyk, & Tyrell, 2011; Waldrip, Malcolm, & Campbell, 2008). In fact, close friendships are so important to an individual's well-being that researchers have found inverse associations between the quantity and the quality of an individual's social relationships and morbidity and mortality (Holt-Lunstad, Smith, & Layton, 2010; Perissinotto, Cenzer, & Covinsky, 2012).

Despite the benefits and advantages of having close friendships, researchers have found that although both men and women desire closeness in their friendships, the manner in which this goal is achieved appears to be different, grounded not in sex per se, but heavily influenced by perceptions of socially constructed and socially appropriate gender roles (Fehr, 2004; Swain, 1989; Wood & Inman, 1993). The outcome of such strongly gendered approaches to friendship appears to be the establishment of both masculine and feminine friendship styles, each affected by social norms and standards for appropriate gender role performance. Swain (1989), Wood (2013), and others have described how men establish and maintain closeness in their same-sex friendships through an activity-based orientation, i.e., "closeness in the doing," while women maintain closeness in their same-sex friendships through talk, i.e., "closeness in the dialogue." Thus, questions of what benefits friendships provide and how men and women pursue such outcomes have been asked and substantively answered. However, what remains unclear is why men and women pursue similar goals in their same-sex friendships but take different approaches to doing so. Put simply, why do men take a different pathway to closeness with their male friends than women do with their female friends?

One possible explanation is grounded in the qualities and characteristics of male/male friendship itself. Scholars investigating same-sex friendships between men have described them as being less intimate, supportive, and open than female same-sex friendships, as well as more competitive, emotionally restrained, masculine, and homophobic (Bank & Hansford, 2000; Hall, 2011; Monroe, Baker, & Roll, 1997; Oswald, Clark, & Kelly, 2004; Reis, 1998). Of particular importance to the current study is the consistent finding that male/male friendships involve less self-disclosure than do friendships between women (Fehr, 2004; Jones, 1991; Stokes, Fuehrer, & Childs, 1980; Wright, 2006), presumably because the desire to appear masculine and to avoid appearing feminine pushes men toward less emotional and vulnerable same-sex friendships.

Although most men tend to adopt a more overtly masculine style of friendship, the inherent qualities and demands of close friendship (e.g., closeness, satisfaction, and commitment) may extend beyond the common, more stoic and activity-driven mandates of masculine norms. For example, Inman (1996) revealed multiple themes of closeness commonly experienced by men in same-sex friendships, including emotional bonding through a shared sense of history together, being able to support and depend on each other, a deep sense of mutual understanding, a profound feeling of connection, and an

assumed, yet often unspoken relational significance. These types of friendship interactions often require a much more intimate and emotional style of interpersonal communication than the type provided by an activity orientation to friendship; in short, they usually demand higher amounts of self-disclosure.

Men who desire or need this level of intimacy and emotional support from their samesex friends potentially face multiple and formidable challenges, most notably, the fear of appearing overly feminine in their behavior with other men and thus, associated concerns with the influence of homophobia (Bank & Hansford, 2000). Furthermore, the majority of research on male friendship assumes proximity and the ability of men to be in the same place in order to fulfill the expectations of this unique, gendered, activity-driven friendship style. However, there is reason to believe that geographic distance might actually hinder men's friendship quality due to a lack of opportunity for shared activity (Rohlfing, 1995) and a simultaneous need for more frequent talk in order to stay connected at a distance.

Consequently, we sought to extend previous research on men's same-sex friendships by testing the degree to which gender orientations and homophobia predicted men's reports of relational quality with their same-sex friends (i.e., closeness, satisfaction, and commitment). We also wanted to assess the degree to which engaging in a more feminine style of interaction within male same-sex friendship influences friendship quality. Thus, our hypothesized model positioned men's self-disclosure as a potential mediator of their gender orientation and homophobia, and their reports of relational quality with their same-sex friends. Given previous research to suggest that friendships in general vary in relational quality as a function of geographic distance (Adams, 1998; Becker et al., 2009; Johnson, Haigh, Craig, & Becker, 2009; Stafford, 2005), we tested our hypothesized model for measurement and structural invariance across long-distance (LD) and geographically close (GC) friendships.

Theoretical perspective

Gender orientation and men's same-sex friendships

Our investigation was guided by the underlying assumption that gender heavily influences interpersonal interaction within the same-sex friendships of men. Researchers have described the unique style of male same-sex friendship interaction as an expression of "gendered closeness" (Floyd, 1995). As such, close friendships between men are generally characterized as instrumental and more focused on shared activities, with a side by side interpersonal orientation (Baumgarte & Nelson, 2009; Wright & Scanlon, 1991). Compared with other friendship types, men generally seek a companion in their same-sex friendships as opposed to a confidante (Wood, 2001), as men often view their male friendships as an important source of physical/instrumental support and camaraderie (Coates, 2003; Grief, 2006). At the same time, male same-sex friendships tend to be overtly competitive, involve lower levels of overt affection, and less personal self-disclosure (Aukett, Ritchie, & Mill, 1988; Baumgarte & Nelson, 2009; Bowman, 2008; Grief, 2009). For example, in his study of male same-sex friendships, Swain (1989) found that more than two-thirds of his male participants pointed to activities other

than talking (e.g., drinking together, watching, or playing sports) as their most meaningful friendship experiences. Although most men agreed that personal and intimate self-disclosure is the primary pathway to building intimacy in friendship, Fehr (2004) found that, nevertheless, men still preferred to communicate closeness through shared activities.

From this standpoint, Gender Role Theory (Eagly, 1987) argues that members of society know what constitute appropriate gender role behaviors and that community members agree, comply with, and reinforce these standards in everyday interactions. Eagly reasoned that because men and women are expected to fulfill different roles in society, they behave and are evaluated differently. Women are expected to fill communal/relational roles (e.g., caring and nurturing), while men are expected to fill agentic/instrumental roles (e.g., task-oriented and leadership), and this divergence of gender role expectations leads to a host of differences in the interpersonal behaviors of both men and women. In fact, Eagly et al. (2000) suggested that the enactment of behaviors associated with one's sex is reinforcing and confirming to gender identity, while engaging behaviors of the other sex is threatening to gender identity in a number of ways, particularly so for the interaction of men in the presence of other men. For example, Smith, Noll, and Bryant (1999) found that men described themselves as less expressive during same-sex interaction than in opposite-sex interaction, while women's expressivity did not differ by biological sex.

Therefore, men invested in gender role demands emphasizing masculine qualities that reinforce a strong and confident persona may avoid behaviors that challenge or threaten their ability to uphold masculine gender norms. Conversely, to the extent that the expression of feelings or requests for emotional support may be associated with the disclosure of personal weakness, vulnerability, and failures (i.e., perceived feminine forms of emotional self-disclosure), men who conform to masculine norms might refrain from such behaviors in an attempt to appear more confident and self-reliant, especially in the presence of other men.

To date, research supports Fehr's (2004) argument that men generally use a masculine style of communicating closeness (i.e., through shared activities) in their same-sex friendships even though the feminine style of communicating closeness (i.e., through self-disclosure) is perceived to create greater intimacy. Femininity has been described by scholars as being more relational or communal than masculinity (Wood, 1993). In romantic relationships, for instance, a feminine gender orientation is a better predictor of the use of relational maintenance strategies than a masculine orientation (Stafford, Dainton, & Haas, 2000). Respectively, femininity is more closely associated with the routine use of relational maintenance behaviors, while masculinity is more closely associated with strategic uses (Aylor & Dainton, 2004). Researchers have also demonstrated that maintenance strategy use in friendships is directly related to increased levels of friendship satisfaction and commitment. Specifically, the maintenance strategies of positivity, openness, interaction, and supportiveness were related to increased satisfaction in friendships, while the strategies of interaction and supportiveness were related to increased commitment (Oswald, Clark, & Kelly, 2004). If more feminine individuals routinely use more maintenance strategies than masculine individuals, then feminine men would likely have closer same-sex friendships than

masculine men because they use more maintenance strategies that promote more relational qualities such as closeness, satisfaction, and commitment. Indeed, past research supports the notion that femininity is positively associated with intimacy in friendships, while masculinity is negatively associated with intimacy (Bank & Hansford, 2000; Williams, 1985).

If a feminine gender orientation is positively associated with the routine use of relational maintenance behaviors (Stafford et al., 2000), and such behaviors are associated with friendship closeness, satisfaction, and commitment (Oswald et al., 2004), then it stands to reason that femininity positively predicts relational quality in men's same-sex friendships. Conversely, masculinity is perhaps less likely than femininity to engender relational closeness, satisfaction, and commitment in personal relationships, although in the context of men's same-sex friendships, it likely fulfills gender role expectations. Thus, we hypothesized that both gender orientations would positively predict men's reports of relational quality in their same-sex friendships, albeit to different degrees and for different reasons (see Figure 1).

Homophobia and men's same-sex friendships

A second but equally important goal of our investigation involved the potential influence that homophobia may have on men's self-disclosure and reports of relational quality in their same-sex friendships. Although masculine behaviors are likely to fulfill men's expectations of what males do with other male friends, Bank and Hansford (2000) found that masculinity was negatively associated with intimacy in men's same-sex friendships. However, they interpreted their finding by pointing to the potential influence of homophobia on men's reports of intimacy in their same-sex friendships. Others have argued that homophobia is one of the primary reasons for less closeness, less overt affection, and less self-disclosure in men's same-sex friendships (Bowman, 2009; Floyd & Morman, 1997; Grief, 2009; Monroe et al., 1997).

Researchers consistently and persuasively argue that homophobia is an obstacle to intimacy for men and that the fear of being labeled homosexual strongly influences men to conform to a more traditional male sex role (Gormley & Lopez, 2010). For example, Johnston (1989) found that compared with men described as androgynous, men who identified with the traditional male sex role were more homophobic and had less intimate same-sex friendships. Devlin and Cowan (1985) reported a direct relationship between homophobia and a lack of intimacy in male friendships, while Fuehrer and Childs (1980) found homophobia to be negatively correlated with self-disclosure. More recently, Gormley and Lopez (2010) discovered that a fear of intimacy contributed to homophobic attitudes in heterosexual men, with higher levels of attachment avoidance (i.e., a dismissive attachment style) predicting higher levels of homophobia.

Although homophobia is a multidimensional, psychosocial construct that encompasses perceptions of homosexuality, homosexual individuals, and homosexual behavior, for the purposes of the present study homophobia is conceptualized as a general fear of being perceived by others as homosexual (Floyd & Morman, 2000). Based on this conceptualization, men in same-sex friendships, who adopt a masculine orientation to friendship may be concerned about how they are perceived by their male





friends during both face-to-face and mediated interactions, and thus, will adjust their behavior in order to maintain the appearance of being heterosexual (Brunch, 2002). Consequently, we reasoned that homophobia promotes the adoption of a more masculine style of communicating closeness in the friendships of men mainly because sharing activities is perceived to be more normative. It follows that the more appropriate way to maintain stereotypical, masculine friendships is to simultaneously mitigate perceptions of overtly feminine behavior. For men who want or need to engage a more feminine style of interaction with a male friend, however, the risk of being perceived as acting feminine increases the chances of also being perceived as appearing homosexual (Floyd, 2000). If homophobia is negatively associated with femininity, and femininity is positively associated with relational quality in friendships, then it stands to reason that homophobia should negatively predict men's reports of satisfaction, closeness, and commitment with their same-sex friends (see Figure 1).

Self-disclosure as a mediator of gender, homophobia, and relational quality

Theoretically, we anticipated that gender orientation and homophobia would not only have direct effects on relational quality in men's same-sex friendships but also have indirect effects by enhancing (or hindering) levels of self-disclosure. For example, in his study of men's same-sex friendships, Bowman (2008) found that masculinity was negatively associated with a willingness to self-disclose and that both femininity and androgyny were associated with a greater willingness to self-disclose. Other studies have reported that due to the demands of the masculine gender role, men are (a) more reluctant to self-disclose to other men (Blieszner & Adams, 1992; Duck & Pittman, 1994), (b) expected not to disclose as much (Duran & Kelly, 1985; Jones & Brunner, 1984), (c) are less receptive to self-disclosure from others (Brunch, 2002), and (d) provide less emotional support (Burleson, Holmstrom, & Gilstrap, 2005). In fact, Eisler (1995)

reported that exchanges of emotion between men are associated with higher levels of psychological distress in men.

Despite these lines of research, however, Fehr (2004) provided convincing evidence that males perceive self-disclosure as the primary pathway to building closeness in friendship, yet they choose to communicate closeness through activity. Other studies have found similar results in terms of men identifying self-disclosure as the primary communication behavior that facilitates closeness in friendships even though they often report relatively low levels of self-disclosure in their own same-sex friendships (Holmstrom, 2009; Reisman, 1990). In fact, more than four decades of research on male self-disclosure has demonstrated that men avoid revealing personal information about themselves primarily due to their own desires to appear more masculine, more heterosexual, and less feminine (Fehr, 2004; Lewis, 1978; Snell, Belk, Flowers, & Warren, 1988). Consequently, we reasoned that masculinity and homophobia would negatively predict self-disclosure in men's same-sex friendships, while femininity would positively predict self-disclosure (see Figure 1).

At the same time, researchers have demonstrated that in men's same-sex friendships, self-disclosure is positively associated with closeness (Bowman, 2008), relational satisfaction (Meeks, Hendrick, & Hendrick, 1998), relational stability (Sprecher, 1987), and feelings of love and commitment (Sprecher & Hendrick, 2004). Reisman (1990) found that greater amounts of self-disclosure lead to greater friendship satisfaction in men, while Bank (1995) reported a positive association between frequent expressive behaviors in best same-sex male friendship and more enjoyment of the friendship. Consistent with previous research, then, we predicted that self-disclosure would not only positively predict men's reports of satisfaction, closeness, and commitment in their same-sex friendships but that it would function as an explanatory mechanism in our hypothesized model by mediating the effects of gender and homophobia on all three relational outcomes (see Figure 1).

Geographic distance and men's same-sex friendships

Finally, we anticipated that physical distance might alter the associations in our hypothesized model (Becker et al., 2009). Previous research on men's same-sex friendships has focused primarily on GC friends, privileging frequent in-person interaction as a necessary condition for male/male friendship closeness and satisfaction (Johnson et al., 2009). Clearly, if shared activities is the primary and preferred method of establishing and maintaining friendship between men, geographic distance poses a formidable challenge to sustaining closeness within men's friendships (Rohlfing, 1995).

Therefore, men who find themselves in LD friendships with other men may need to renegotiate the manner in which they typically maintain their close friendships, a challenge that potentially mandates a change from the masculine style of *doing* to the more feminine style of *talking*. If men feel closer to their GC friends primarily due to having more opportunities to share activities together, then it stands to reason that these same men may be more satisfied and committed to a GC friendship than to a LD friendship. At a minimum, one might suspect that geographic distance would alter the degree to which self-disclosure mediates the impact of gender and homophobia on

relational outcomes in men's same-sex friendships. To investigate this line of reasoning, we tested our hypothesized model for measurement and structural invariance across GC and LD male friendships.

Method

Participants

Participants included 211 men aged between 18 and 73 years (M = 27.38, SD = 11.71). The majority were Caucasian (81%), followed by Hispanic (5.7%), Asian/Pacific Islander (5.2%), African American (4.7%), Native American (.9%), and Other (1.9%). Nearly half of the participants were single (48.8%), though 28.4% of the men were in a dating relationship and 22.7% were married. Several participants were pursuing a bachelor's degree (40.8%), followed by those who had already earned a bachelor's degree (20.9%), those pursuing a graduate/professional degree (13.3%), those who had a high school diploma/GED (10.4%), those who had a professional degree (8.1%), those who had a doctoral degree (4.3%), and those with an associate's degree (2.4%).

Participants were also asked to report demographic information about their close, same-sex friend. The age of the participants' friends ranged from 18 to 66 years (M = 27.27, SD = 11.50). The majority of the participants' friends were Caucasian (80.1%), followed by Asian/Pacific Islander (6.6%), Hispanic (5.2%), African American (4.3%), Native American (.9%), and Other (1.9%). More than one-third of the friends were single (36.5%), followed by those in a dating relationship (32.7%) and those who were married (29.9%). Selection criteria for identifying participants in LD friendships (LD) included: (1) you and your close same-sex friend live at least 50 miles apart; (2) your friendship is characterized by little or no face-to-face contact; and (3) your friendship may have started as GC but is presently in LD. In contrast, GC friendships were defined as: (1) you and your close same-sex friend live less than 50 miles apart and (2) your friendship is characterized by frequent face-to-face contact. Based on these criteria, 104 men reported on a LD friendship, while 107 reported on GC (GC) friendships. Men in LD friendships had been friends for an average of 10.85 years (SD = 8.66), while men in GC friendships reported being friends for an average of 7.34 years (SD = 8.29).

When combined, the men's friendships ranged from 3 months to 43 years, with a mean friendship length of 9.27 years (SD = 8.59).

Procedure

In order to recruit participants for the current study, we used network sampling (Granovetter, 1976). Upon securing institutional review board approval, emails inviting participation and containing a link to an online survey were distributed through Facebook friendship networks and by purchasing Facebook advertisement postings, as well as through inclusion within a local apartment newsletter. Participants who received the message containing the web-link for the study were asked to complete the survey and then pass the link on to other men they knew. All email messages clearly stated that only

men aged 18 years or older should participate. No incentive (e.g., extra credit) was offered for participation, and in order to encourage participants to be honest in their responses, participants were assured that the survey was anonymous and confidential. Finally, all the participants were randomly assigned to either the LD or GC survey; once there, the definition for either the GC or LD friendship was provided (see above). Participants were then instructed to determine their closest male friend in this context (i.e., LD or GC) and respond with this particular friend as the target for their answers to the survey questions. Out of 259 online survey participants, only 131 fully completed the survey and were retained for analysis.

Additionally, two different pencil and paper versions of the survey (one for LD and the other for GC friends) were randomly distributed to undergraduate male students in a large lecture public speaking course at a private university in the southwest region of the US. The paper surveys were printed from the Survey Monkey website and were exact replicas of the two online surveys. In all, 80 paper surveys were completed and returned.

Measures

Gender orientation. We measured participants' gender orientation (i.e., femininity and masculinity) using Wheeless and Dierks-Stewart's (1981) revised version of Bem's Sex Role Inventory (SRI, Bem, 1974). This measure uses 10 personality characteristics associated with traditional American masculinity (e.g., acts as a leader, aggressive, and independent) and 10 personality characteristics typically associated with American femininity (e.g., gentle, friendly, and supportive). Responses were solicited using a seven-point Likert scale that ranged from (1) *Strongly disagree* to (7) *Strongly agree*. Previous researchers have demonstrated the validity and reliability of the revised SRI (e.g., Aylor & Dainton, 2004), and in this study, the scale produced acceptable Cronbach's alpha coefficients of .84 for masculinity and .88 for femininity.

Homophobia. We operationalized participants' homophobia using Floyd's (2000) homophobia scale. The scale included five items used to measure participants' fears of being perceived by others as gay (e.g., "I would be very upset if someone else thought I was gay," "If a homosexual person began talking to me in public, I would be concerned about what other people might think"). Responses were solicited using a seven-point Likert scale that ranged from (1) *Strongly disagree* to (7) *Strongly agree.* Floyd (2000) provided evidence of divergent and concurrent validity for the homophobia scale, and in this study, the measure produced an alpha coefficient of .82.

Self-disclosure. We measured participants' self-disclosure with their same-sex friends using a modified version of Wheeless and Grotz's (1977) self-disclosure scale. The scale included six items that measured the participant's perceived amount of self-disclosure in the friendship (e.g., "I often divulge information about myself that I normally do not tell others"). Responses were solicited using a seven-point Likert scale that ranged from (1) *Strongly disagree* to (7) *Strongly agree*. In this study, the scale produced an alpha of .87.

Relational closeness. We measured relational closeness using Aron, Aron, and Smollan's (1992) Inclusion of the Other in the Self (IOS) scale. The IOS scale asserts that in a close relationship, an individual acts as if there is a degree of inclusion of the *other* within the self, i.e., close friends believe they are interconnected with each other. The IOS scale consists of a set of Venn-like diagrams, each representing varying levels of overlap. One circle in each pair is labeled "self" and the other circle is labeled "other." Participants were instructed to select the pair of circles that best depicted the nature of perceived closeness in their same-sex friendship. The IOS scale has been validated for use in both experimental and correlational research designs (Aron & Fraley, 1999; Johnson et al., 2009).

Relational satisfaction. We operationalized relational satisfaction using Floyd and Morman's (2000) relational satisfaction scale. The scale included six items measuring participants' satisfaction with their same-sex friendship (e.g., "My relationship with my friend is just the way I want it to be"). Again, responses were solicited using a seven-point Likert scale that ranged from (1) *Strongly disagree* to (7) *Strongly agree.* In this study, the satisfaction scale produced an alpha coefficient of .89.

Relational commitment. We measured participants' commitment to their friends using a modified version of Rusbult, Martz, and Agnew's (1998) commitment subscale from the Investment Model Scale. The original measure included eight items assessing relational commitment in romantic relationships. In this study, we modified five items to measure participants' commitment to their same-sex friends (e.g., "I am committed to maintaining my friendship with my male friend"). Responses were solicited using a seven-point Likert scale that ranged from (1) *Strongly disagree* to (7) *Strongly agree*. The modified measure demonstrated strong internal reliability with an alpha coefficient of .92.

Data analysis

Structural equation modeling (SEM) with maximum likelihood (ML) estimation using LISREL 8.80 was employed to test the hypothesized associations in Figure 1. Consistent with two-step modeling procedures outlined by Kline (2005), a confirmatory factor analysis (CFA) of the measurement model was conducted to assess the relationships among indicators and their respective latent constructs prior to testing the hypothesized mediation model. The measurement model included seven latent constructs: (a) masculinity, (b) femininity, (c) homophobia, (d) self-disclosure, (e) closeness, (f) satisfaction, and (g) commitment. With the exception of closeness, all constructs were formed by *parcel*ing each related measurement scale into three parcels, which are "aggregate-level [indicators] comprised of the sum (or average) of two or more items, responses, or behaviors" (Little, Cunningham, Shahar, & Widaman, 2002, p. 152). The parceling technique has several advantages over using items as indicators, including greater reliability, more precise identification of the latent construct, and fewer parameter estimates (Kline, 2005; Little et al., 2002). Given unidimensional measures and no a priori rationale to guide parcel construction, items were assigned to parcels by thirds (e.g., for the self-disclosure scale, items 1 and 4 were averaged to form parcel 1, items 2 and 5 were averaged to form

parcel 2, and items 3 and 6 were averaged to form parcel 3). For closeness, Aron et al. (1992) examined the reliability of the IOS measure and found 72.25% shared variance in 2-week test–retest administrations as well as 95% shared variance across two different versions of the instrument (one with circles and one with diamonds). Thus, the average of these two estimates (83.6%) was used to fix the error variance of the IOS using the method described by Stephenson and Holbert (2003).

For both measurement and structural models, model fit was evaluated with the ML chi-squared statistic. Due to the sensitivity of large sample sizes in the chi-squared statistic, the non-normed fit index (NNFI), comparative fit index (CFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA) were also examined to assess model fit. Values greater than .90 for the NNFI and CFI may indicate reasonably good fit (Hu & Bentler, 1999), while SRMR estimates less than .10 are generally considered favorable (Kline, 2005). RMSEA estimates less than .05 indicate close model fit, values between .05 and .08 suggest reasonable fit, and values greater than .10 suggest poor fit (Browne & Cudeck, 1993). All the values were standardized prior to evaluating the models.

Finally, in order to compare the hypothesized model across GC and distant friendship groups, it is first necessary to establish measurement invariance between both groups (Little, 1997). Following the procedures described by Little (1997), establishing measurement invariance requires a series of sequential model tests including: (a) testing the relationship between the manifest indicators and the latent constructs across groups (i.e., *configural invariance*), (b) testing the equality of the loadings from the indicators to the latent constructs across groups (i.e., *loading* or *weak metric invariance*), (c) testing the equality of the means of the manifest indicators across groups (i.e., *intercept* or *strong metric invariance*), (d) testing the homogeneity of variances and covariances across groups, (e) testing the equality of correlations between latent constructs, and (f) testing the equality of the means of the latent constructs.

For most models, constructs were identified by fixing the latent variance in the first group to 1.0 (Kline, 2005). Although this procedure standardizes the variance metric between groups, it does not permit estimation of the latent means in the first group. Therefore, for tests involving the latent mean, the model was identified using an effects coding procedure (Little, Slegers, & Card, 2006). This method involves constraining the loadings of each construct's manifest indicators to average 1.0 and the mean of each construct's model fit.

Results

Descriptive statistics, including means, standard deviations, and Pearson product-moment correlations for all variables included in the study, are reported in Table 1. Given that the length of the friendship may alter the associations in the hypothesized model, we conducted a series of correlations to determine if friendship length needed to be entered as a control variable. With the exception of a small but negligible association with commitment (r = .18, p < .01), no other significant associations emerged, and thus, we proceeded with tests of measurement invariance for the hypothesized structural model.

Variable	М	SD	Ι	2	3	4	5	6	7
I. Masculinity	4.92	.89	_						
2. Femininity	5.23	.87	.27ª	_					
3. Homophobia	3.77	1.53	.02	08	_				
4. Self-disclosure	4.74	1.38	.16 ^b	.35ª	25^{a}	_			
5. Closeness	4.57	1.52	.07	.28ª	—.13	. 49 ^a	_		
6. Satisfaction	5.50	1.20	.07	.12	03	.27ª	.36ª	_	
7. Commitment	5.92	1.11	.17 ^b	.28ª	09	.49ª	.51ª	.40 ^a	-

Table I. Descriptive statistics and Pearson product-moment correlations for all manifest variables (N = 211).

 $^{a}p < .01.$

^ьр < .05.

Measurement models

Prior to tests of metric invariance, we conducted a CFA using the full sample to test the convergent and divergent validity of the seven-factor model. This model produced good fit, $\chi^2(132, N = 211) = 217.83, p < .01$, NNFI = 0.97, CFI = 0.97, SRMR = .05, RMSEA = .053 (90% CI: .039–.066). No additional modifications were identified that were theoretically defensible and would improve model fit. Each of the indicators loaded well on their hypothesized latent constructs, and thus, the standardized loadings, residual error terms, and covariances among the latent constructs are presented in Table 2.

To test whether strong metric invariance could be established between GC versus distant friendship groups, we examined the two-group measurement model with freely estimated model parameters. This model demonstrated acceptable fit, $\chi^2(264, N = 211) = 394.57$, p < .01, NNFI = 0.95, CFI = 0.96, SRMR = .06, RMSEA = .06 (90% confidence interval (CI): .044–.075). Next, we tested for weak metric invariance by constraining the loadings of the manifest indicators onto the latent constructs to equality between groups. The Δ CFI and RMSEA model tests (Little, Card, Slegers, & Ledford, 2007) yielded no significant change in model fit (see Table 3), thus indicating that weak metric invariance is tenable. Likewise, the test for strong metric invariance also produced no meaningful change in the CFI or RMSEA fit statistic (see Table 3). These tests indicators are assessing the same latent constructs for participants reporting on GC versus distant friendships (Little, 1997).

After establishing strong metric invariance, an omnibus test evaluated the homogeneity of the variances and covariances. This test passed, indicating no significant differences in the variance/covariance matrix between GC and LD friendship groups. A final series of tests on the latent parameters evaluated whether the construct means differed significantly between both friendship groups. The omnibus test of all latent means revealed significant differences in the means between groups (see Table 3). A series of follow-up tests on each latent construct, however, revealed only one significant mean difference across all seven latent constructs, with participants in GC friendships reporting higher relational satisfaction (M = 5.76) than those in geographically distant friendships (M = 5.25).

Latent construct indicator	Lambda (λ) (residual)	Ι	2	3	4	5	6	7
I. Masculinity		1.00						
Parcel I	.81 (.34)							
Parcel 2	.78 (.39)							
Parcel 3	.84 (.30)							
2. Femininity		.32 ^b	1.00					
Parcel I	.79 (.38)							
Parcel 2	.90 (.19)							
Parcel 3	.82 (.32)							
3. Homophobia		.06	08	1.00				
Parcel I	.83 (.32)							
Parcel 2	.91 (.17)							
Parcel 3	.54 (.71)							
4. Self-disclosure		.17 ^c	.38 ^b	—.26 ^b	1.00			
Parcel I	.89 (.20)							
Parcel 2	.80 (.37)							
Parcel 3	.90 (.18)							
5. Closeness ^a	.96 (.09)	.07	.30 ^b	14	.54 ^b	1.00		
6. Satisfaction		.10	.17°	0I	.31 ^b	.39 ^b	1.00	
Parcel I	.89 (.21)							
Parcel 2	.98 (.04)							
Parcel 3	.68 (.53)							
7. Commitment		.20 ^b	.33 ^b	04	.53 ^b	.56 ^b	.47 ^b	1.00
Parcel I	.94 (.12)							
Parcel 2	.90 (.18)							
Parcel 3	.77 (.40)							

Table 2. Standardized lambda (λ) loadings, residuals, and covariance estimates for indicators of latent constructs (N = 211).

IOS: Other in the Self scale.

^aCloseness was measured using the single-item IOS indicator, and the residual error term was estimated using $(1 - \alpha) \times variance$ of the indicator.

^bp < .01.

°p < .05

Structural model and tests of mediation

Since the previous analyses supported the homogeneity of variances and covariances between the two friendship groups, we collapsed both groups into a single structural model. The saturated model produced good model fit, $\chi^2(132, N = 211) = 217.83$, p < .01, NNFI = 0.97, CFI = 0.97, SRMR = .05, RMSEA = .053 (90% CI: .039– .066), yet contained several nonsignificant paths (see Figure 2). To provide a more parsimonious model that still fit the data, and consistent with standard procedures for model trimming (Kline, 2005), nonsignificant paths were removed iteratively (beginning with the statistically least significant path) until only significant paths remained in the model. The trimmed model demonstrated good model fit, $\chi^2(142, N = 211) = 229.04$, p < .01, NNFI = 0.97, CFI = 0.97, SRMR = .06, RMSEA = .053 (90% CI: .040–.066), and did not produce a significant decline in model fit from the saturated model, $\Delta \chi^2(10) = 11.20$, p > .05.

-		-	-								
Model	χ^{2}	df	þ	$\Delta \chi^2$	Δďf	þ	RMSEA	RMSEA 90% CI	NNFI	CFI	Constraint tenable
Configural invariance	394.57	264	10 [.] >	I	I	I	090.	.044–.075	0.95	0.96	N/A
Loading invariance ^a	405.00	276	10 [.] >	I	I	I	.059	.043–.073	0.95	0.96	Yes
Intercept invariance ^a	417.34	288	10 [.] >	I	I	I	.057	.040071	0.95	0.96	Yes
Homogeneity of variances and covariances ^b	446.05	304	0. >	41.05	28	>.05	.058	.043–.072	0.95	0.96	Yes
Latent mean invariance ^c	434.30	295	10. 	I 6.96	~	<.05	.058	.042–.072	0.95	0.96	٥N
CFI: comparative fit index; CI: confidence interval;	RMSEA: ro	oot mea	ın square	error of	approx	imation	: NNFI: non	-normed fit index.			

Table 3. Fit indices for the nested sequence in the multiple group confirmatory factor analysis.

Notes. Each nested model contains its constraints, plus the constraints of all previous, tenable models.

^aEvaluated with the ΔCFI and RMSEA Model Fit Tests.

^bEvaluated with the χ^2 difference test, in comparison to the loading (weak) invariance model. ^cEvaluated with the χ^2 difference test, in comparison to the intercept (strong) invariance model.

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Figure 2. Full structural model of self-disclosure as a mediator of masculinity, femininity, homophobia, and relational outcomes in men's same-sex friendships (N = 211). [†]p < .10, **p < .01.



Figure 3. Final model of self-disclosure as a mediator of femininity, homophobia, and relational outcomes in men's same-sex friendships. **p < .01.

As depicted in Figure 3, the final structural model indicates that femininity has a direct, positive effect on self-disclosure in men's same-sex friendships, while homophobia has a direct, negative effect. Self-disclosure, in turn, has positive effects on closeness, satisfaction, and commitment in same-sex friendships. When combined, femininity, homophobia, and self-disclosure account for 29% of the variance in closeness, 10% of the variance in satisfaction, and 28% of the variance in commitment. Finally, to determine if there are significant indirect effects in the model, bootstrapping analyses were conducted using LISREL to acquire standard error estimates and 95% CIs from 1000 samples for each indirect effect (Hayes, 2009). The results indicate that self-disclosure mediates the effects of femininity and homophobia on participants' reports of closeness, satisfaction, and commitment in same-sex friendships (see Table 4).

Indirect effect	β	SE	95% CI (lower, upper)	κ ²
I. Masculinity \rightarrow Self-disclosure \rightarrow Closeness	.044	.052	—. 057 , .152	.04
2. Masculinity \rightarrow Self-disclosure \rightarrow Satisfaction	.023	.029	033, .089	.02
3. Masculinity \rightarrow Self-disclosure \rightarrow Commitment	.044	.052	—.057, . 1 56	.04
4. Femininity \rightarrow Self-disclosure \rightarrow Closeness	.205	.062	.095, .340 ^a	.17
5. Femininity \rightarrow Self-disclosure \rightarrow Satisfaction	.111	.044	.036, .206 ^a	.10
6. Femininity \rightarrow Self-disclosure \rightarrow Commitment	.202	.063	.090, .341ª	.17
7. Homophobia \rightarrow Self-disclosure \rightarrow Closeness	141	.058	264,036 ^a	.13
8. Homophobia \rightarrow Self-disclosure \rightarrow Satisfaction	075	.036	$160,018^{a}$.08
9. Homophobia \rightarrow Self-disclosure \rightarrow Commitment	—. 37	.055	253,041ª	.13

Table 4. Bootstrap analysis of indirect effects and effect size estimates.

CI: confidence interval.

^aIndirect effect is significant at p < .05 (excluding zero).

Effect size estimates for each indirect effect in Table 4 reveal medium effect sizes across all six indirect effects (Preacher & Kelley, 2011).

Discussion

The primary goal of this study was to test the extent to which self-disclosure mediates the influence of gender and homophobia on the relational quality (i.e., satisfaction, commitment, and closeness) of men's same-sex friendships. Overall, the hypothesized model provided a good fit to the data and support for the contention that self-disclosure mediates the effects of femininity and homophobia on closeness, satisfaction, and commitment within the same-sex friendships of men. These effects generalize to both LD and GC friendships as no significant differences emerged in the latent means, variances, and covariances between both groups. Although femininity was positively associated with all three relational outcomes in men's same-sex friendships at the bivariate level of analysis, only indirect effects emerged in our hypothesized model through levels of self-disclosure. Likewise, homophobia was relatively unrelated to relational quality at the bivariate level of analysis, yet negative, indirect effects emerged for homophobia on all three relational outcomes by influencing self-disclosure in men's same-sex friendships. Consequently, the results of this study extend previous research on the associations among gender orientations, homophobia, self-disclosure, and the quality of men's same-sex friendships by providing at least three sets of implications worth noting.

First, our findings replicate extant research on the direct, positive relationship of femininity with self-disclosure while reinforcing previous findings detailing the direct, yet negative associations of homophobia and self-disclosure within male friendship (Bowman, 2008). That is, men who view themselves as being gentle, supportive, nurturing, and friendly (among other feminine qualities) are more likely to self-disclose to their same-sex friends, while men who fear being perceived by others as gay are less likely to self-disclose. Furthermore, these data are consistent with decades of research on relationship quality that overwhelmingly supports the contention that

femininity is associated with stronger friendship quality between men and their perceptions of closeness, satisfaction, and commitment (e.g., Bank & Hansford, 2000).

Interestingly, homophobia was relatively unrelated to men's reports of closeness, satisfaction, and commitment in their same-sex friendships, and masculinity was associated only with commitment, though the effect size was small. This overall lack of association between masculinity, homophobia, and friendship quality may be the result of the fact that our male participants were asked to report on their closest same-sex friendships. After several years of being friends, it may be that any issues of homophobia or non-normative masculine behavior have long since been resolved and no longer have much salience in these well-established friendships where presumably, both men know each other well and feel comfortable and secure in each other's presence (Hall, 2011). If men in the initial stages of same-sex friendship development had been included in the current study, issues of masculine norms and homophobia might have produced a much stronger effect on friendship quality because these men would not have had the time to negotiate the effects of uncertainty generated by these issues (Bowman, 2008).

A second set of implications emerging from the present study revolve around the role of self-disclosure in mediating the associations among femininity, homophobia, and the relational quality of men's same-sex friendships. As expected, self-disclosure mediated the effects of femininity on closeness, satisfaction, and commitment within these friendships. Our results indicate that femininity is associated with an interaction context that strengthens the friendship bond; thus, such men have greater friendship quality because they interact in a manner that promotes and elicits greater friendship quality, i.e., they self-disclose more. Sanderson, Rahm, and Beigbeder (2005) found that male and female same-sex friends with strong intimacy goals for their friendships experienced greater satisfaction at least in part because they reported eliciting more self-disclosure from their friends. The current study extends on these findings by offering an explanation for why a goal of more intimacy is related to stronger friendship quality. Feminine characteristics in men potentially create a context or foundation from which to establish, and then pursue with some confidence, the goal of more intimacy in the friendship. For men with the desire to pursue higher same-sex friendship quality, these feminine characteristics provide the foundation for doing so. Feminine men appear to structure and experience their friendships in distinct ways, and as a result, have better friendship quality because they engage in particular types of communication behaviors (self-disclosure) associated with stronger friendship quality.

Perhaps, more interesting was the pattern of effects for homophobia. Specifically, the fear of being perceived by others as homosexual may only interfere with having a close, satisfying, and committed same-sex friendship, when it is negatively associated with the tendency to self-disclose. This result is meaningful, given that it provides further clarification to previous research documenting negative associations between masculinity and intimacy in men's friendships (Bank & Hansford, 2000). Although no significant association between masculinity and homophobia were found, it could very well be the case that when both are combined and used as predictors of communication behaviors thought to enhance relational quality (e.g., self-disclosure), homophobia becomes negatively associated with the effects of masculinity on men's same-sex

friendships. Thus, for homophobic men, higher levels of self-disclosure in the friendship become negatively related with perceptions of closeness, satisfaction, and commitment, presumably because personal forms of communication create a more feminized relational context. This, in turn, may then correspond with the risk of appearing emotional, vulnerable, or weak and thus not adhering to the demands of the masculine gender role. Collectively, then, it appears that self-disclosure is facilitating both the positive and the negative effects of femininity and homophobia on friendship quality, respectively.

A third set of implications to emerge from the current study involves the comparisons made between men in GC and LD same-sex friendships. Despite only one mean-level difference in relational satisfaction for both friendship groups, the pattern of associations in the final structural model was consistent for men in both friendship types. In other words, the positive, indirect effects of femininity and the negative, indirect effects of homophobia on the relational quality of men's same-sex friendships through selfdisclosure remain, regardless of geographic distance. These findings are meaningful for men who find themselves negotiating a same-sex friendship at a distance and concerned about a decline in their friendship quality due to a lack of in-person, activity-driven friendship maintenance (Rohlfing, 1995). For men forced to renegotiate friendship quality based on activity to one based on talk, such a shift does not necessarily predict a negative association with friendship quality if more self-disclosure is enacted. Distance need not forecast an end to male friendship because increased self-disclosure can mediate friendship quality, regardless of distance. For example, Johnson (2001) found both LD and GC friendships shared similar amounts of openness and assurances and that both friendship types were similar in terms of satisfaction and closeness. This suggests that, regardless of geographic distance, certain interpersonal communication practices are important for maintaining men's friendships.

To the extent that homophobia is negatively related to a man's willingness to self-disclose in a LD friendship, however, our findings suggest that a negative association with friendship quality may inevitably result. Indeed, it may not be a lack of activity that is negatively related to the same-sex quality of men's LD friendships so much as it is the negative association between homophobia and self-disclosure. Consequently, even though our final structural model was invariant for men from both GC and LD friendships, the fact that the indirect effects reported here were comparable for men from both friendship types only strengthens the generalizability of the theoretical role that self-disclosure may play in association with stronger relational quality within the friendships of men.

Limitations and directions for future research

Despite the contributions of this report, the results should be interpreted with caution, given the inherent limitations of the research design. A key limitation to this report is the cross-sectional nature of the research design as well as our reliance on the individual rather than the dyad as the unit of analysis. Clearly, patterns of self-disclosure and the degree to which such patterns mediate the influence of gender and homophobia on men's same-sex friendships are likely to vary over time and as a function of negotiated and

shared meanings. Likewise, the use of self-report methods (rather than observational measures) and the homogenous sample warrant caution. Tests of mediation and statements of causality based on the results of statistical techniques, such as structural equation modeling, must be treated with caution, given the correlational nature of the data.

Nevertheless, friendships between men are influenced by a number of factors that shape perceptions of relational quality and have implications for theorizing about the nature of relationship maintenance in same-sex friendships. Our project contributes to these efforts by attempting to directly test for any differences in friendship quality within LD and GC male same-sex friendships. This is meaningful because most of the research on the same-sex friendships of men assumes a GC context and by extension that men need close proximity in order to maintain friendship quality. The current study represents an initial attempt to challenge these long-held assumptions. Future researchers might extend our efforts by testing for the same mediating effects of self-disclosure within the same-sex friendships of women, in opposite sex friendships, or perhaps in more culturally diverse friendship forms. Researchers might also examine similar mediating processes in the early stages of men's same-sex friendships.

Conclusion

Although researchers have devoted the better part of two decades documenting the individual and relational benefits of close friendships, researchers continue to grapple with a simple, yet provocative question: Why do men enact different communication behaviors to achieve closeness with their male friends than women do with their female friends? In the late 1990s, Fehr (1996) provided a simple, yet provocative answer to this question, "because they choose to" (p. 141). Our results are consistent with Fehr's (1996) parsimonious reply to this question, yet they further reveal that self-disclosure may operate as an important mechanism that explains why men are more hesitant to engage their male friends in more intimate forms of dialogue.

Clearly, our results suggest that if men want more closeness, satisfaction, and commitment from their same-sex friendships, one way to achieve such a goal may simply be to self-disclose more. Contrary to popular opinion, men may in fact know what makes them feel closer to their male friends (and what does not); they may know what types of interaction promote forms of intimacy with which they are most comfortable (and with which they are not); and they may understand how to express closeness in ways most valued, appreciated, and understood *by other men*. At the same time, when more intimate forms of interpersonal communication become salient within the same-sex friendships of men, two different processes of friendship quality may emerge, both grounded in gender and yet mediated by the same communication behavior.

Authors' Note

One reviewer requested information about the variable distributions in our report. An examination of the variable distributions revealed that the commitment was the only variable that was slightly, negatively skewed. All other variables were within acceptable ranges of what might be considered normally distributed. We transformed the commitment scale and re-examined our bivariate correlations, none of which changed in magnitude. Consequently, we reported the original scaling

of the commitment variable so as to retain interpretability of the mean and standard deviation for this measure. Portions of this manuscript were based on the third author's thesis completed under the direction of the first author. This study was approved by the institutional review board at Baylor.

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